WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

a compressing unit which compresses received image data; and

a controlling unit which orchestrates a flow of image data from said reading unit to said compressing unit in such a manner that the image data corresponding to the obverse surface and the reverse surface is input into said compressing unit at different timing.

2. The image processing apparatus according to claim 1, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

3. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

a storing unit which receives and stores therein the image data read by said reading unit;

a compressing unit which receives and compresses the

image data stored in said storing unit; and

a controlling unit which orchestrates compression of the image data stored in said storing unit by said compressing unit in such a manner that the image data corresponding to the obverse surface and the reverse surface is compressed at different timing.

4. The image processing apparatus according to claim 3, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

5. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

a data dividing unit which divides the image data acquired by said reading unit from the obverse surface and reverse surface respectively into image data of m × n pixels, where n is the number of lines and m is the number of pixels in one line;

a storing unit which receives the image data of first m × (n-1) pixels, corresponding to the obverse surface and the reverse surface, from said data dividing unit, and stores

the data therein;

a compressing unit which receives the image data of m × n pixels and compresses the image data as a single unit;

a switch unit which controls a flow of the image data from said storing unit to said compressing unit, wherein said switch unit allows either the image data corresponding to the obverse surface or the reverse surface to be input into said compressing unit at one time; and

a transmission controlling unit which controls a flow of the image data from said data dividing unit to said storing unit and to said compressing unit, wherein said transmission controlling unit allows the image data of first m × (n-1) pixels from said data dividing unit to be input into said storing unit, and allows the image data of last m pixels from said data dividing unit to be directly input into said compressing unit.

6. The image processing apparatus according to claim 5, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

7. The image processing apparatus according to claim 5, wherein the magnitudes to m and n are decided based on the amount of data said compressing unit can compressed at one time.

8. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

a data dividing unit which divides the image data acquired by said reading unit from the obverse surface and reverse surface respectively into image data of $m \times n$ pixels, where n is the number of lines and m is the number of pixels in one line, and $n<N$ and $m<M$ where N is the maximum number of scan lines, and M is the maximum number of pixels in one lines;

a storing unit which receives the image data of first $m \times (n-1)$ pixels, corresponding to the obverse surface and the reverse surface, from said data dividing unit, and stores the data therein;

a switch unit which allows either the image data corresponding to the obverse surface or the image data corresponding to the reverse surface to be input into said compressing unit at one time; and

a compressing unit which receives the image data of first $m \times (n-1)$ pixels, corresponding to either the obverse

surface or the reverse surface, from said data storing unit, receives the image data of last m pixels directly from said data dividing unit.

9. The image processing apparatus according to claim 8, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

10. The image processing apparatus according to claim 8, wherein the magnitudes to m and n are decided based on the amount of data said compressing unit can compressed at one time.

11. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

an obverse image processing unit which subjects the image data corresponding to the obverse surface to a specific image processing;

a reverse image processing unit which subjects the image data corresponding to the reverse surface to a specific image processing;

an appending unit which appends identifying information for identifying whether the image data read by the reading unit is the image data corresponding to the obverse surface or the image data corresponding to the reverse surface; and

a communication line which connects said obverse image processing unit and said reverse image processing unit, the communication line being used in transmitting or receiving the image data.

12. The image processing apparatus according to claim 11, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

13. An image processing apparatus comprising:

a reading unit which simultaneously reads image data from two, an obverse and a reverse, surfaces of a document;

an appending unit which receives the image data acquired by said reading unit appends identifying information to the image data for identifying whether the image data corresponds to the obverse surface or to the reverse surface; and

a communication line to be used to send the identifying information appended image data corresponds to the obverse surface and the reverse surface;

an obverse image processing unit which obtains, based on the appended identifying information, only the image data corresponding to the obverse surface from said communication line, and performs specific image processing to the obtained image data; and

a reverse image processing unit which obtains, based on the appended identifying information, only the image data corresponding to the reverse surface from said communication line, and performs specific image processing to the obtained image data.

14. The image processing apparatus according to claim 13, wherein said reading unit includes,

an obverse reading unit which reads image data from the obverse surface of the document; and

a reverse reading unit which reads image data from the reverse surface of the document.

15. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

a compressing means for compressing received image

data; and

a controlling means for orchestrating a flow of image data from said reading means to said compressing means in such a manner that the image data corresponding to the obverse surface and the reverse surface is input into said compressing means at different timing.

16. The image processing apparatus according to claim 15, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.

17. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

a storing means for receiving and storing therein the image data read by said reading means;

a compressing means for receiving and compressing the image data stored in said storing means; and

a controlling means for orchestrating compression of the image data stored in said storing means by said compressing means in such a manner that the image data corresponding to the obverse surface and the reverse surface

is compressed at different timing.

18. The image processing apparatus according to claim 17, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.

19. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

a data dividing means for dividing the image data acquired by said reading means from the obverse surface and reverse surface respectively into image data of m × n pixels, where n is the number of lines and m is the number of pixels in one line;

a storing means for receiving the image data of first m × (n-1) pixels, corresponding to the obverse surface and the reverse surface, from said data dividing means, and storing the data therein;

a compressing means for receiving the image data of m × n pixels and compresses the image data as a single means;

a switch means for controling a flow of the image data from said storing means to said compressing means, wherein

said switch means allows either the image data corresponding to the obverse surface or the reverse surface to be input into said compressing means at one time; and

a transmission controlling means for controling a flow of the image data from said data dividing means to said storing means and to said compressing means, wherein said transmission controlling means allows the image data of first m × (n-1) pixels from said data dividing means to be input into said storing means, and allows the image data of last m pixels from said data dividing means to be directly input into said compressing means.

20. The image processing apparatus according to claim 19, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.

21. The image processing apparatus according to claim 19, wherein the magnitudes to m and n are decided based on the amount of data said compressing means can compressed at one time.

22. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

a data dividing means for dividing the image data acquired by said reading means from the obverse surface and reverse surface respectively into image data of m × n pixels, where n is the number of lines and m is the number of pixels in one line, and n<N and m<M where N is the maximum number of scan lines, and M is the maximum number of pixels in one lines;

a storing means for receiving the image data of first m × (n-1) pixels, corresponding to the obverse surface and the reverse surface, from said data dividing means, and stores the data therein;

a switch means for allowing either the image data corresponding to the obverse surface or the image data corresponding to the reverse surface to be input into said compressing means at one time; and

a compressing means for receiving the image data of first m × (n-1) pixels, corresponding to either the obverse surface or the reverse surface, from said data storing means, receives the image data of last m pixels directly from said data dividing means.

23. The image processing apparatus according to claim 22, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.

24. The image processing apparatus according to claim 22, wherein the magnitudes to m and n are decided based on the amount of data said compressing means can compressed at one time.

25. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

an obverse image processing means for subjecting the image data corresponding to the obverse surface to a specific image processing;

a reverse image processing means for subjecting the image data corresponding to the reverse surface to a specific image processing;

an appending means for appending identifying information for identifying whether the image data read by the reading means is the image data corresponding to the obverse surface or the image data corresponding to the

reverse surface; and

a communication line for connecting said obverse image processing means and said reverse image processing means, the communication line being used in transmitting or receiving the image data.

26. The image processing apparatus according to claim 25, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.

27. An image processing apparatus comprising:

a reading means for simultaneously reading image data from two, an obverse and a reverse, surfaces of a document;

an appending means for receiving the image data acquired by said reading means appends identifying information to the image data for identifying whether the image data corresponds to the obverse surface or to the reverse surface; and

a communication line to be used to send the identifying information appended image data corresponds to the obverse surface and the reverse surface;

an obverse image processing means for obtaining, based

on the appended identifying information, only the image data corresponding to the obverse surface from said communication line, and performs specific image processing to the obtained image data; and

a reverse image processing means for obtaining, based on the appended identifying information, only the image data corresponding to the reverse surface from said communication line, and performs specific image processing to the obtained image data.

28. The image processing apparatus according to claim 27, wherein said reading means includes,

an obverse reading means for reading image data from the obverse surface of the document; and

a reverse reading means for reading image data from the reverse surface of the document.